

REMARKS

I. INTRODUCTION

In response to the Notice of Non-Compliant Appeal Brief dated November 23, 2005, and in conjunction with the Request for Continued Examination (RCE) submitted herewith, claims 29, 50 and 69 have been cancelled, and claims 24, 28, 30-42, 44-45, 49, 51-62, 68 and 70-82 have been amended. Claims 24-28, 30-49, 51-68 and 70-88 remain in the application. Re-examination and re-consideration of the application, as amended, is requested.

II. PRIOR ART REJECTIONS

A. The Office Action Rejections

In paragraph (6) of the previous Office Action, claims 24-34, 36-40, 42, 43, 46-55, 57-61, 63-74, 76-80, 82 and 83 were rejected under 35 U.S.C. §102(e) as being anticipated by Iyer, U.S. Patent No. 5,899,992. In paragraphs (9) and (10) of the previous Office Action, claims 35, 56, and 75 were rejected under 35 U.S.C. §103(a) as being unpatentable over Iyer in view of SAS Institute Inc., SAS OnlineDoc, Version 8, Cary, NC: SAS Institute Inc., (SAS). In paragraphs (11) and (12) of the previous Office Action, claims 41, 62, and 81 were rejected under 35 U.S.C. §103(a) as being unpatentable over Iyer in view of SPRINT: A Scalable Parallel Classifier for Data Mining, John Shafer, Rakesh Agrawal, Manish Mehta, Proceeding of the 22nd VLDB Conference Mumbai (Bombay), India, 1996. In paragraphs (13) and (14) of the previous Office Action, claims 44 and 45 were rejected under 35 U.S.C. §103(a) as being unpatentable over Iyer in view of Bridges, U.S. Patent No. 5,548,770.

Applicants' attorney respectfully traverses these rejections.

B. The Applicants' Independent Claims

Applicants' independent claims 24, 44 and 45 are generally directed to computer-implemented system, method and article of manufacture for performing data mining applications. Claim 24 is representative and comprises the elements of:

(a) a computer having one or more data storage devices connected thereto, wherein a relational database is stored on one or more of the data storage devices;

(b) a relational database management system, executed by the computer, for accessing the relational database stored on the data storage devices by executing Structured Query Language (SQL) statements;

(c) an analytic application programming interface (API), executed by the computer, for invoking one or more scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database; and

(d) one or more analytic algorithms, executed by the computer, for interfacing to the analytic API to invoke the scalable data mining functions.

C. The Iyer Reference

Iyer describes a method, apparatus, and article of manufacture for a computer implemented scaleable set-oriented classifier. The scalable set-oriented classifier stores set-oriented data as a table in a relational database. The table is comprised of rows having attributes. The scalable set-oriented classifier classifies the rows by building a classification tree. The scalable set-oriented classifier determines a gini index value for each split value of each attribute for each node that can be partitioned in the classification tree. The scalable set-oriented classifier selects an attribute and a split value for each node that can be partitioned based on the determined gini index value corresponding to the split value. Then, the scalable set-oriented classifier grows the classification tree by another level based on the selected attribute and split value for each node. The scalable set-oriented classifier repeats this process until each row of the table has been classified in the classification tree.

D. The SAS Reference

SAS describes a correlation matrix. The correlation matrix table contains Pearson product-moment correlations of Y variables. Correlation measures the strength of the linear relationship between two variables.

E. The Shafer Reference

Shafer describes a scalable parallel classifier for data mining. A decision-tree-based classification algorithm, called SPRINT, removes all memory restrictions and is fast and scalable.

F. The Bridges Reference

Bridges describes an indexing system and method for improving retrieval of data based on a query from a user from a database management system including a main computer and a memory coupled to the main computer for storing the data. The indexing system includes a parallel computer coupled to the main computer and a parallel disk array coupled to the parallel computer. The invention includes the steps of storing record based data in the memory of the database management system, storing a value based index of selected attributes related to the record based data on the parallel disk array, and determining whether the parallel computer can be used to execute a query to obtain at least a partial result to the query. If so, the query is sent to the parallel computer and the query is executed on the parallel computer to obtain at least a partial result. If a final result cannot be determined on the parallel computer, the partial result from the parallel computer is sent to the database management system and a final result is determined on the database management system using the partial result received from the parallel computer.

G. Applicants' Claims Are Patentable Over The References

Applicants' attorney respectfully submits that Applicants' claims 24-28, 30-49, 51-68 and 70-88 are patentable over the cited references, because the references do not teach or suggest the specific combination of elements recited in Applicants' independent claims.

Specifically, the references do not teach or suggest the limitations directed to:

“an analytic application programming interface (API), executed by the computer, for invoking one or more scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database; and”

“one or more analytic algorithms, executed by the computer, for interfacing to the analytic API to invoke the scalable data mining functions.”

For example, the only API discussed in the Iyer reference is the Structured Query Language (SQL) Application Programming Interface (API) of the relational database management system (RDBMS).

However, the SQL API of the RDBMS in Iyer does not perform the same functions as Applicants' analytic API. Specifically, the SQL API of the RDBMS in Iyer does not invoke scalable data mining functions comprised of SQL statements for execution by the relational database management system, wherein the scalable data mining functions identify and interpret patterns in the relational database. Instead, the SQL API of the RDBMS in Iyer only invokes functions of the RDBMS, but says nothing about generating a set of scalable data mining functions as recited in Applicants' claims.

Further, Iyer does not teach or suggest an analytic algorithm, executed by the computer, that interfaces to the analytic API to invoke the scalable data mining functions.

The remaining references fail to overcome the deficiencies of the Iyer reference. Recall that these remaining references were cited only against other elements of Applicants' independent and dependent claims.

Thus, Applicants' attorney submits that the independent claims are allowable over the cited references. Further, the remaining dependent claims are submitted to be allowable over the cited references in the same manner, because they are dependent on the independent claims, and thus contain all the limitations of the independent claims. Moreover, the dependent claims recite additional novel elements not shown by the references.

III. CONCLUSION

In view of the above, it is submitted that this application is now in good order for allowance and such allowance is respectfully solicited.

Should the Examiner believe minor matters still remain that can be resolved in a telephone interview, the Examiner is urged to call Applicants' undersigned attorney.

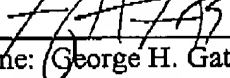
Respectfully submitted,

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